



**Undirected Academic Talent to Blame for Adolescent Radicalization and Student Unrest in  
Secondary Schools in Kenya**

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**Abstract**

*Academic performance is a function of many interrelated variables including inherent study efforts, modes of teaching, school environment and family related factors. Academically talented students are often expected to perform and maintain high academic performance. However, sometimes their performance is unexpectedly variable. To compound this scenario, data lacks of many Kenyan schools whether students' attitudes towards their teachers affect their academic performance. This study therefore investigated the effects of attitudes of academically talented secondary school students toward their teachers and how this impact on their academic performance in Keiyo District. The study specifically assessed, academic performance of the academically talented students, their attitudes towards teachers and how the attitudes toward teachers affected their academic performance. The three variables were discriminated further on the basis of gender, types of school, age and class. The main factors affecting talented students academic performance were also determined. The entire study was propounded on the basis of learning theory postulated by Bandura (1977), which asserts the importance of learned behaviour in humans as well as using Festinger's theory (1957) of cognitive dissonance, which postulate the innate relationships between cognitions, behaviour and attitudes. This study was conducted using ex post facto design. Data were collected from a sample of 300 students in Form 3 and 4 using structured questionnaires, using stratified and purposive random sampling techniques. Data collected were coded in Statistical Package for Social Sciences (SPSS v. 13.5) and analysed by descriptive statistics, frequency distributions, bivariate correlations and parametric tests (ANOVA and factor analysis). Results indicated that most of the academically talented students had positive attitudes towards their teachers, which significantly ( $P < 0.05$ ) influenced their academic performance. Discrimination of the attitudes of the respondents among attributes indicated that gender, age and types of school had a significant ( $P < 0.05$ ) influence on the students' attitudes towards their teachers, which ultimately influenced their overall academic performance. However, class did not significantly ( $P > 0.05$ ) influence students' attitudes towards their teachers. Students attitudes towards teachers were found to be a function of 14 variables intimately linked to students relationships with their teachers. These factors were broadly categorized into students-teacher relationships, students' academic inputs, and workload for students. This study has aptly demonstrated that academic performance is related to students' attitudes towards their teachers. In view of high investment cost by many schools to improve academic performance, and taking cognisance of the role that students attitudes play, it is recommend that schools should dedicate part of their investments on inculcating and fostering positive students attitudes through routine and regular legislation of guidance and counselling to encourage students to develop positive attitudes towards their teachers. More research is however, required to determine the best teaching methods that will encourage students to develop positive attitudes towards their teachers that would definitely encourage improved academic performance.*

**Key words: Academic, Talent, Radicalization, student unrest**

**Introduction**

Education is increasingly gaining prominence as one of the most important subject in Africa. One of the overriding United Nations (UN) Millennium goals is the provision of education for all by the year 2015. Many countries of the world have invested huge sums of their budgets to enhance attainment of education by the citizens. In Kenya, education is fundamental in the development of human persons and has been viewed principally in light of a

fundamental human right (Kyalo, Osano, Maundu, and Kipkemboi, 2006) as well as being the cradle of mankind. Therefore providing enabling environment for students in schools remain a major and a fundamental issue among policy designers. Quality in the education system in Kenya is still tied intimately to attainment of the top most echelon in the education system. This will involve learning to the university level.

According to Watson and Ashton, (1995) each person is unique, has unique gifts and problems, is subject to unique influence promoting certain aspects of learning and inhibiting others. Gifted and Talented Education, (2006) stated that United states have schools tailored towards developing the student's talent. The White Paper (2005) set out Britain's ambition that every student-gifted and talented, struggling or average should have the right of personalized support to reach the limits of their capacity. At present, the Kenyan Education lacks such provisions for the academically talented hence their gifts may lie either unnoticed or unutilized.

Recognizing the unique needs of students with high potential, classes have been developed to help students develop their cognitive (thinking) such as logical reasoning, problem solving, critical thinking and creative thinking Law (2003) noted Kalnes and John, (1991) also noted that there are many facets of giftedness and no single child demonstrates all. The academically talented students in Kenya are placed in the mainstream with the rest of the students, which makes it difficult to recognize their needs to enable their instruction hence impossible for them to exercise their academic potential to the full.

Kamunge Report (1988), noted that in every society, there are especially gifted and talented persons whose special gifts and talents begin to show at a fairly early age. It recommended that such people should be identified early, given encouragement, adequate challenges and facilities to direct their training into fields that enhance overall development of the nation. This report, however noted that apart from regular formal education, training and research programmes for identification and development of specially gifted and talented individuals should be carried out. Although the working party proposed that such students should be identified and their gifts and talents developed in specific schools; such recommendations have not been implemented. Further to that, Koech Report, (1999), Totally Integrated Quality Education and Training, (TIQET) lamented that the gifted and talented individuals in Kenya have not been given due recognition.

A major challenge that the academically talented individuals experience is lack of motivation. Watson and Ashton (1995) cited that the most serious enemy of learning is boredom. There are marked differences

among the gifted and talented persons in their interest, achievement, motivation and attachment. A programme, teacher or situation that is viewed with disfavour may develop unfavourable attitudes within the learner. Therefore, attitudes of the academically talented students should be established in order to provide them with proper programmes that enhance motivation.

One of the prime factors causing boredom is lack of ownership of what an individual does. Everyone's needs are different. The needs of the academically talented students have not yet been attended to specifically. A brand of education that seeks to build up that individual's self esteem positively is a key requirement concludes Watson and Ashton (1995). This is specifically missing in the Kenyan education system at present.

Effort is lacking in the identification of academically talented student, organization, presentation and provision of the right curriculum for this exceptional persons. The U.S Department of Education's report; A case for developing America's talent (1993), describes a "quiet crisis" concerning the education of gifted youth in America. In many publications, most of the concern regarding the failure of students in education has referred to those described as at risk of failure due to low achievement. This has generally not included those students who are gifted, as it is a common misconception that such individuals will do well in school with little help or no help at all. This is also the state of affairs in Kenya today since the academically talented students are placed in the mainstream of other learners with the assumption that they are automatically good performers hence will achieve their potential. It is against this background that the researcher set to investigate the effects of attitudes of academically talented secondary students towards their teachers on their academic performance in Keiyo District. The objectives of the study were to investigate the effects of attitudes of academically talented students on general student behavior and whether their attitudes differ with gender.

The study was based on the social learning theory by Bandura (1977) and cognitive dissonance of Festinger (1957). The basic tenet of social learning theory is that most important parts of individual's behaviour are learned from other persons in society – family, friends, teachers and culture. Bandura

considers modeling to be an important demonstration of the role of cognition in learning. In this view, Bandura, sees a great deal of cognitive learning taking place through watching, before there is any chance for the behaviour to occur and be reinforced. Modeling as a strategy for producing change clearly can have powerful effects on behaviour. The exact processes are harder to isolate. Bandura (1977) suggests several possible effects of vicarious reinforcement such as informative function of observed outcomes, discrimination learning, incentive motivational effects, vicarious conditioning, and extinction of arousal and modification of model status.

Motivation comes from an external reinforcement; such as experiment promises of a reward, or can come from vicarious reinforcement, based on the observation that models are rewarded. People are capable of internalizing motivational processes, becoming self-regulating and providing self-reinforcement for much of their behaviour. The person and the environment are interlined consul network.

Teachers and parents are seen as models for students to imitate. Models that are imitated should be appropriate and friendly. More powerful models are more likely to be imitated than the less powerful ones and the consistency of a model's behaviour is seen to be a factor likely to be imitated. In the social learning theory view, a person will develop an adequate personality only if he or she is exposed to good models and reinforced for appropriate behaviour. This will influence future learning behaviour.

Besides modeling, attitudes of students towards their teachers play a great role in the learning process. Attitudes are defined as a mental predisposition to act that is expressed by evaluating a particular entity with some degree of favour or disfavour. The attitudinal consequences of engaging in counter-attitudinal behaviour have been studied intensively within the framework of cognitive dissonance theory. This theory, first proposed by Festinger (1957), is perhaps the best known among a group of theories which deal with the effects of inconsistencies between beliefs, attitudes and behaviours. Cognitive consistency theories assume that such inconsistency is a source of tension and/or discomfort, and that the individual will

therefore prefer where possible to reduce or eliminate the inconsistency.

The awareness of a dissonant relationship between two cognitions is thought to give rise to cognitive dissonance, a psychologically uncomfortable state, the existence of which will motivate the individual to reduce the amount of dissonance being experienced. There are two characteristics of cognitions, which have a bearing on the amount of dissonance experienced. Cognitions vary in their importance to the individual. Other things being equal, the amount of dissonance experienced increases with the importance of the cognitions involved.

One of the main reasons for the tremendous interest in attitudes displayed by social psychologists is the assumption that attitudes have a causal impact on behaviour.

Knowing that the factors listed above differentiate gifted underachievers from gifted achievers provides researchers with a possible new line of enquiry that is, designing interventions to change students' attitudes and perceptions in the hope of reversing their patterns of underachievement. Guidance for the design of such interventions comes from research in the field of educational psychology on four characteristics of achievers: - Self - efficacy, environmental perceptions, goal orientation, and self - regulation. First, high academic achievers are self - efficacious. They have high academic self - perceptions and they believe that they have the ability to perform well (Bandura 1986; Schunk 1984).

Second, they trust their academic environment and expect that they can succeed in it. They expect that this environment is conducive to their performance of academic tasks and they have positive attitudes toward their teachers and school. These studies were done in U.S. but are these results applicable to the Kenyan learner? This study was carried out in order to find out whether the same case applies in Kenya. These studies on attitudes of high academic achievers attempts to establish the situation of the concept as far as the Kenyan learner is concerned and find ways to help him/her to perform up to his/her expected potential.

Third, the high achievers find school or believe that what they are doing in school produce beneficial outcomes for them. Finally, they implement self - regulating strategies where they set realistic expectations and implement appropriate strategies to complete

their goals successfully. Teachers' compliments should be specific to the skills students are acquiring. A specific compliments, such as, "You really know how to calculate area", provides more information to students than a general comment, such as, "Good job". Feedback linking success with ability is more effective if feedback is provided early in students' performance, (Schunk 1984, 1989).

In the general sense, Lindgren (1980) views that a perceived self of students includes their school, class and teacher, as well as the work they do. A student's work is not separable from him or her, for it is part of his or her perceived self. Lindgren also comments that teachers sometimes forget that students have a personal investment in things that are part of their perceived self.

Generally, high achievers are self-efficacious. First, they have high academic self-perception and they believe that they have the ability to perform well (Bandura, 1986; Schunk, 1984). Second, they trust their academic environment and expect that they can succeed in it. They expect that this environment is conducive to their performance of academic tasks and they have positive attitudes towards their teachers and school. Third they find school meaningful (Atkinson, 1964). They enjoy school or believe that what they are doing in school will produce beneficial outcomes for them. Finally, they set realistic expectations and implement appropriate strategies to complete their goals successfully.

When teachers give students opportunities to revise their work, they promote efficacious behaviour. Teacher compliments should be specific to the skills students are acquiring (Schunk, 1984, 1989). Underachievers appear to display negative attitudes toward school (Bruns, 1992; Clerk, 1988; Diaz, 1988; Ford, 1996; Frankel, 1965; Mandel and Marcus, 1998; McCall, Evahn, Kratzer, 1992; Rimm, 1995) stated that high achievers, on the other hand, tend to be interested in learning and to have positive attitudes toward school (Majoribanks, 1992; Mandel & Marcus, 1988; MC Coach and Siegle, 2001; Weiner, 1992).

Some common characteristics of gifted are; Superior reasoning powers, Persistent intellectual curiosity, Wide range of interests., Markedly superior in quality or quantity of written and/ or spoken vocabulary, reads avidly and absorbs books well beyond his or her years, Learns quickly and easily and

retains what is learned, Shows unsightly to arithmetical problems that requires careful reasoning and grasps mathematical concepts readily, has a keen sense of humor, sets high standards for self. Although all students may exhibit these traits, academically talented students possess these characteristics to a much greater extent than do other students of the same age, background, and experience. Gifted students also exhibit them in a more consistent manner and to a degree that they require modifications to their educational plan for further development to occur.

The characteristics noted above are not always exhibited positively. These students are not always the 'teacher pleasers' good students who get straight A's and behave in the classroom. A child who is highly verbal may talk constantly, use language to show off or gain attention, or use inappropriate language. A curious child may be unable to focus on a task or assignment chosen by the teacher. An idealistic child may question discussions and directions made by the teacher. When these students' unique needs aren't met in the classroom, they often do poorly academically, although they have the ability to do well, and they often misbehave. Teachers and parents can misinterpret the bad behaviors and fail to recognize the underlying reason for its frustration or boredom; A case for developing America's talent (1993) noted.

Maryland's (1993), noted that without a comprehensive plan of services, these students are at risk of not meeting their potential. The special academic, social, and emotional needs of the population of children are compelling reasons to provide appropriate educational services, for at least a part of the school day or week, with other students of similar abilities. When gifted students are appropriately challenged, everyone wins. The children learn to love school and to love learning. They will achieve as much as they are allowed to achieve and can spread this enthusiasm to their classmates. They will be engaged in their educational activities and will not get into as much trouble in the classroom, making the teacher's job easier. And society will gain a productive member capable of extraordinary abilities and performance.

Some researchers indicate that opportunities for gifted females have increased, while barriers to their achievement have decreased (Reis and Callahan, 1989). They also found that women have experienced improvements



in participation at all higher education levels. Middle school and high school girls have positive attitudes toward school but negative attitudes toward mathematics. Stipek (2006) article suggested that girls have lower expectations for themselves in math than boys, and that girls believe they do not have mathematical ability. These beliefs begin early in their education and persist into junior high school and probably beyond.

This study relied on ex post facto design. This study was carried out in secondary schools in Keiyo District, in Rift Valley Province. The target population for this study comprised of all gifted secondary school students in Keiyo District which comprised of Girls' boarding, boys' boarding, co-educational boarding, and co-education day schools. The four types of school were further categorized as district schools and provincial schools. The research sample consisted of 338 students. A questionnaire used and it was drawn from three sources namely: Items developed by Kaikai (1992); Some of the items used by Laurence (1984), which were adopted and modified to fit the study; and items developed by the researcher. Items developed by Kaikai and Lawrence were found to be relevant to the present study. The questionnaire had 54 items. Pilot study was carried out in 4 schools in Uasin Gishu District. One school was from each category of schools such as co-educational boarding, co-educational day, girls' boarding and boys' boarding respectively. The reliability coefficient of 0.5 and above was accepted as a good measure of reliability. Computation using the above formula yielded a reliability coefficient of 0.8, which was judged as a good measure of reliability.

**Table 4.1: Background information of the respondents**

a) Gender

	Frequency	Percent
Male	163	48.2
Female	175	51.8
Total	338	100

b) Types of school

	Frequency	Percent
Co-educational day	37	9.3
Co-educational boarding	62	17.7
Girls boarding	121	37.0
Boys boarding	118	36.0

To determine the content validity of the questionnaire items, three experts in the department of Educational Psychology, Moi University examined the questionnaire items and their suggestions and comments were used as a basis to modify the research items and make them adaptable to the study. Based on the feedback offered by those who examined the questionnaire the wording of the questionnaire was slightly modified and other items were added while some were excluded completely.

## FINDINGS

### Background Information of the Respondents

The background information sought included; gender, type of school, class, and age of the respondents (Table 4.1). Gender information is presented in Table 4.1a. From the table, out of a total of 338 respondents, 48.2% of the respondents were males and the remaining 51.6% were females.

The number of respondents per given school sampled in presented in Table 4.1b. Out of the 338 respondents, the majority came from girls boarding (37.0%) followed by boys boarding (36.0%), co-educational boarding had 17.7%, the least being co-educational day (9.3%).

The classes of the respondents are shown in Table 4.1c. From the table, the respondents were sampled from two classes, form three and form four, higher number of the students were from form four (57.3%) as compared to form three (42.7%).

Table 4.1d show the age of the respondents sampled. Majority of the respondents were aged 16-18 years (87.0%), 12.7% of the respondents were aged over 18 years with only a paltry 0.3% being aged 12-15 years.

Total	338	100
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c) Class

	Frequency	Percent
Form 4	191	57.3
Form 3	147	42.7
Total	338	100

d) Age of the respondents

	Frequency	Percent
12-15 years	1	0.3
16-18 years	291	87.0
>18 years	46	12.7
Total	338	100

#### Attitudes of the academically talented students towards teachers

The researcher sought to establish the attitudes of the academically talented students towards their teachers, which would be useful in determining the relationships between the performance and the attitudes. The attitudes were ranked using the Likert scale ranking. Analyses of the attitudes were done using the respondents 54 items of the questionnaires (Appendix I). Likert scale scores based on the 54 items had a minimum value of 54 and maximum possible value of 270. Based on the score values, then 54-108 represented negative

attitudes, 109-215 represented neutral and 216-270 represented positive attitudes.

There was a statistical significant difference in the attitudes of the students towards teachers (Kolmogorov-Smirnov test,  $Z = 48.154$ ,  $P = 0.000$ ). Majority of the academically talented students had a positive attitude (58.9%) towards their teachers. Students with negative attitudes towards their teachers were moderate in proportion (33.5%), however, the proportion of students with neutral attitudes were significantly ( $P < 0.05$ ) lower than the rest. This therefore implies that most of the students interviewed in this study were having generally positive attitudes.

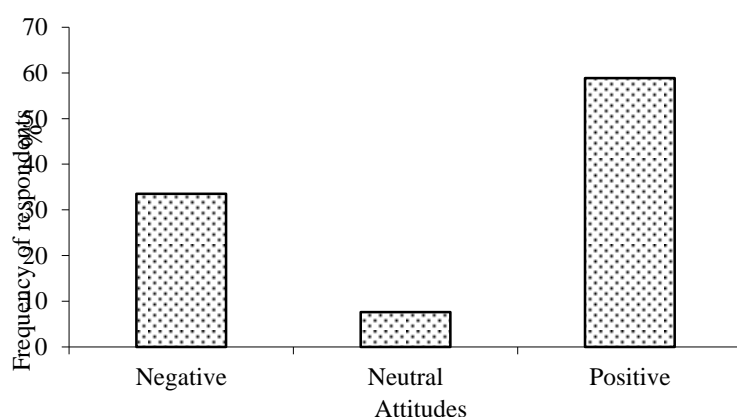


Figure 4.1: Overall attitudes of the academically talented students towards their teachers

#### 4.3.2 Gender differences in attitudes of academically talented students towards teachers

Attitudes of the students toward the teachers were not homogenous prompting the researcher to test the difference between male and female using statistical methods. The

result of the gender differences in the students' attitudes towards their teachers is presented in Figure 4.2 below. From the figure, there were significant differences in the gender attitudes towards the teachers ( $\chi^2 = 8.712$ ,  $df = 2$ ,  $P = 0.037$ ). Less number of females (31.2%) had negative attitudes

towards teachers compared to males (39.2%). Neutral attitudes between males and females were not significantly different ( $P > 0.05$ ). Females had generally more positive attitudes

(59.4%) when compared to the males students (50.1%) of the females; the differences were statistically significant ( $P < 0.05$ ).

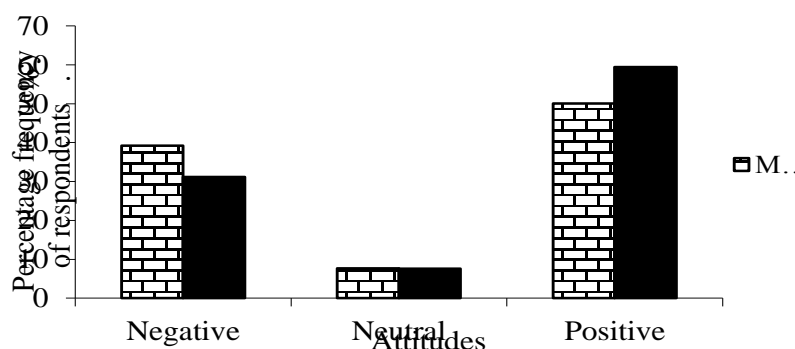


Figure 4.2: Gender differences in attitudes of academically talented students towards their teachers

#### Differences in attitudes of academically talented students towards teachers among types of schools

The attitudes of students towards teachers were also compared for the various types of schools in order to establish the distribution of attitudes among the students from the various types of schools. The results of the attitudes of students towards teachers from various schools are presented in Figure 4.3. The differences in attitudes of students toward teachers were significantly different ( $\chi^2 = 14.859$ ,  $df = 6$ ,  $P = 0.021$ ) among the various types of schools. Negative attitudes were

recorded in 34.9% of the students in co-educational day schools, 33.2% of the students in co-educational boarding, 33.0% in girls boarding and in 33.8% of the students in boys boarding. Neutral attitudes were recorded as 9.5%, 7.9%, 7.1% and 7.5% in co-educational day schools, co-educational boarding schools, girls boarding and boys boarding respectively. Positive attitudes of students towards teachers were recorded more in girls boarding (59.9%) followed by co-educational boarding (58.9%) then boys boarding (58.7%), and finally in co-educational day schools (57.3%).

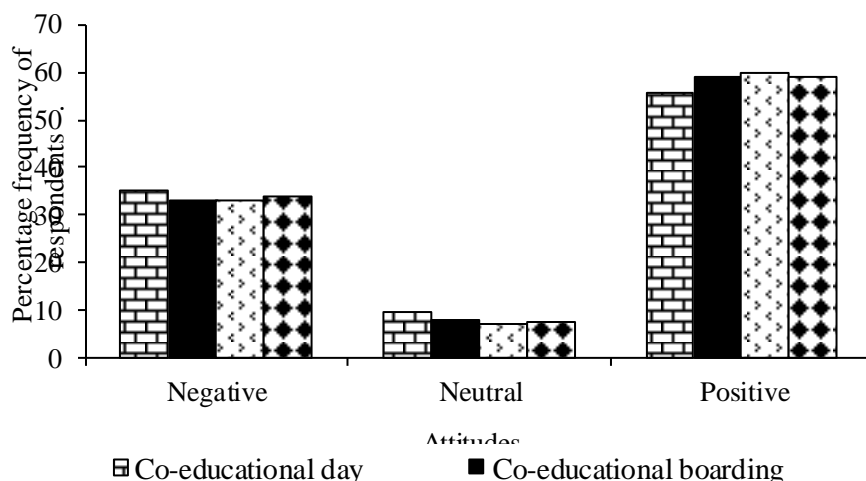


Figure 4.3: Attitudes of academically talented students towards the teachers from various types of schools

#### Age differences in attitudes of academically talented students towards teachers

The age differences considered in the research (12-15 years, 16-18 years and above 18 years)

were compared to determine their overall responses in terms of attitudes towards their teachers. The results are presented in Figure 4.5 below. The differences in attitudes of

students towards their teachers differed significantly ( $\chi^2 = 36.679$ ,  $df = 4$ ,  $P = 0.000$ ) by age. Among students with negative attitudes, students aged 16-18 years dominated (33.8%) which was followed by students aged above 18 years (31.6%) and finally students aged 12-15 years. Among students with neutral

attitudes, majority were aged above 18 years (10.8%) followed by students aged 16-18 years (7.2%) and finally students aged 12-15 years (1.9%). Finally more students aged 12-15 years (64.8%) were found to have more positive attitudes than students aged 16-18 years (59.1%) and above 18 years (57.6%).

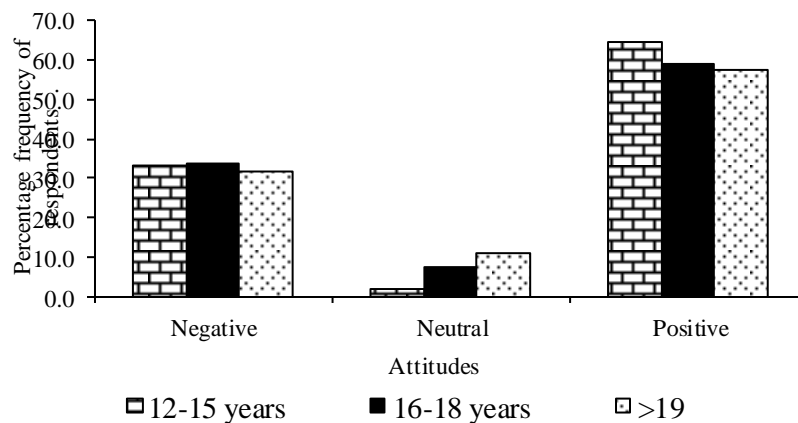


Figure 4.5: Differences in attitudes of different ages of academically talented students towards their teachers

#### Effects of attitudes on Behaviour

#### Factors contributing to positive attitudes and good performance

The factors extracted by principal component analysis as affecting performance of students are presented in Table 4.11 below. All factors with given values greater than one were considered as factors that affect students' performance. From the 54 factors considered, a total of 14 factors affecting performance were extracted, which together accounted for 93.0%

of the observed variations in the students' attitudes. These factors were broadly categorized into student-teacher relationships (problem with teachers, teachers' role in group discussion, teachers as role models, teachers missing classes), students' academic inputs (students being good in all subjects, students' responsibility) and workload for students (syllabus organization, students' opinion, less student workload) as well as luck.

Table 4.11: Factors that contribute towards students performance

Factors contributing to performance	Extraction	Eigenvalues	% Variance	Cumulative %
Problems with teachers	0.988	8.873	16.431	16.431
Teachers encourage group discussions	0.983	6.996	12.956	29.387
Syllabus organization	0.981	5.897	10.921	40.307
Luck	0.979	5.453	10.097	50.405
Teachers as role models	0.974	3.5	6.481	56.886
Teachers-students relationships	0.973	3.258	6.033	62.919
Equal treatment of students	0.973	2.987	5.531	68.449
Good in all subjects	0.970	2.930	5.426	73.875
Students freedom of opinion	0.970	2.344	4.341	78.216
Encourage students in all subjects	0.97	2.044	3.786	82.002
Less workload to students	0.967	1.688	3.125	85.127
Respect for authority	0.967	1.521	2.816	87.943
Teachers missing classes	0.966	1.399	2.591	90.534
Students responsibilities	0.966	1.307	2.420	92.954

#### Discussion and Conclusion

The background of the respondents was sought and it comprised; gender, type of

school, class and age. 48.2% of the respondents were males and the remaining 51.6% were females. Majority of the respondents were in



girls' boarding schools (37.0%) followed by boys boarding (36.0%), co-educational boarding had 17.7% and co-educational day schools had the least number (9.3%).

The respondents were sampled from two classes, Form Three and Form Four. Majority of the respondents were aged 16 to 18 years (87%), 12.7% were aged >18 years with only 0.3% aged 12 to 15 years.

The attitudes of the academically talented students toward their teachers were determined using the Likert scale ranking. Analyses were done using 54 items of the questionnaires. There was an overall significance statistical difference in the attitudes of students towards their teachers. Majority of students had positive attitudes, while a small percentage had neutral and negative attitudes.

Females had generally more positive attitudes when compared to their male counterparts. Positive attitudes were recorded more in girls' boarding schools followed by co-educational then boys boarding and the least was in co-educational day schools. The difference in attitudes between forms four and form three students were not significant.

Among students with negative attitudes, students aged 16 to 18 years dominated which was followed by students aged 18 years and above. Students aged 12 to 15 years were found to have more positive attitudes than the rest of their colleagues.

1. There was a statistically significant difference in the attitudes of the academically talented students towards teachers. Majority of the respondents had a positive attitude towards their teachers. A small number had a negative attitude while the least number had a neutral attitude. It was found that attitude had a significant influence on the performance of the academically talented students. Students who had positive attitude towards teachers performed better than their counterparts who had negative and neutral attitudes respectively.

2. Gender had a significant influence on attitude towards teachers. Females had generally more positive attitude when compared with their male counterparts. Students with good performance were many but the number of female students was significantly higher than that of males.

3. Type of school had a significant influence on attitudes of academically talented towards their teachers. Positive attitudes of

academically talented students towards their teachers were recorded more in girls boarding schools, followed by co-educational boarding then boys boarding and for the least in co-educational day schools. Girls' boarding schools had the best performance followed by boys' boarding schools. Co-educational boarding was third in performance and the least performing students were from co-educational day schools.

4. Class did not have a significant influence on attitudes of academically talented students towards their teachers. The differences in attitudes between form three and form four students were not significant. The differences in performances between form three and form four students were also not significant.

5. Age of the student had a significant effect on her/his attitude towards his/her teacher. Among students with negative attitudes, students aged 16-18 years dominated, which was followed by those aged above 18 years, and finally students aged 12-15 years. Majority of the students aged above 18 years had neutral attitudes while more students aged 12 -15 years were found to have more positive attitudes than students aged 16 - 18 years. Among these students, those aged 12 - 15 years had the best performance when compared to those aged 16 - 18 years and above 18 years.

The majority of academically talented students involved in the study were found to have a positive attitude towards their teachers (66.4% of the studied sample). Students with negative attitudes towards their teachers were moderate in proportion (33.5%) however the proportion of students with neutral attitude were significantly lower than the rest. This finding concurs with studies by McCoach and Siegle (2001) who reported similar findings among two separate profiles of gifted students; one set of students displayed negative attitudes towards teachers and school, while another set reported positive attitudes towards teachers and school; nevertheless their performance were however, not determined. Earlier study by Bandura (1986) and Schunk (1984) reported that high academic achievers have positive attitude towards their teachers and school. The question that needs to be addressed here is why many academically talented students have positive attitudes towards teachers but still performed poorly. Although the students

performance is not only influenced by his /her attitudes towards his/her teacher but other factors such as school environment, family background, health of student come into the play, there is every reason to suspect the existence of a link between students attitude towards his /her teacher and his/her academic performance. Since the teacher is in most cases, the student's role model as well as surrogate parent. Attitude is positively correlated with behavior and both are reciprocal (Gordon, 2000).

It is also overwhelming that a higher number of academically talented students with positive attitude still performed lower than others especially in the boys boarding, co-educational boarding and day, despite the fact that they understood very well about working hard to achieve good results. Attitude was found not to be the only variable that keeps students from doing well. This was explained well by the other factors other than attitude towards their teachers that were established to influence performance to a reasonable percentage. Such factors identified in the study were students having problems with their teachers, teachers encouraging discussion groups, syllabus organization, teachers acting as role models and so on (Table 4.4). The study concurred with Lindgren (1980) who reported that some teachers become preoccupied with structure, control, rules and regulations. Such a preoccupation inevitably leads them to use strategies that are autocratic or authoritarian. The academically talented students as explained earlier differ from the "norm" Since they usually are ahead of the rest of students in the way they grasp the content that is taught. If information is repeated or slowed down, it results in boredom hence frustration. This will be expressed through disruptive behavior: Some lose interest in their daily work and seek refuge in excessive daydreaming and over - activity.

Grenshaft *et al.* (1995) reported that often academically talented students will perform well even if they do not put in much effort toward learning unlike other students without much academic talents. Though, this study did not sample student who have less academic talents, it can be seen that many students with high academic talent and possess negative attitude toward teachers did not perform dismally. Therefore, attitudes of the students toward teachers seem to be a major shaping

factor rather than determinants of performance. Possible reasons are that the learning level may be too simple for them, teaching methods may be opposed to the child's learning style, content may appear to have no reason or purpose, or learning may be occurring without opportunity to apply the knowledge. The student could be bored with classes or with school or he/she may have personality conflict with the teacher. These and many factors other than academic or intellectual ability can affect student's classroom performance.

### **Effects of attitudes on performance of academically talented students by gender**

There was generally a significant relationship between performance and attitudes of female students. Girls with positive attitudes scored high marks while those with negative attitudes relatively scored lower marks. Girls with positive attitudes toward their teachers also scored higher than boys with similar attitudes toward teachers. However, boys with negative attitudes toward teachers performed much better than girls with negative attitudes toward teachers. This therefore shows a strong coupling action in girl - student attitudes and performance. This tends to show that attitudes towards teachers in girl's students determine more of their performance than attitudes of boys toward their teachers. This showed that the performance of the male students is not inherently related to their attitudes in comparison to females. These findings were in line with Emerick (1992) that there was an increasing and progressive tendency to express dislike for academic and social aspect of school in grades five, seven and nine. In many schools, the girls liked and valued academic activities more than boys, but these sex differences narrowed and disappeared later.

These findings are however, in complete contrast to those availed by Mathews (1992) that the progress of girls in school is threatened by a set of attitudes that appear during puberty when girls lose interest in activities requiring intellectual achievements, especially when they involve competition with boys. The findings also differed with Moon *et al.* (1977) that fear of success based on the belief held by adolescent girls that success, especially when achieved through competition with males, will undermine their self-esteem and feelings of femininity and will lead to

their being rejected by members of both sexes. From the findings, it was shown that there is a shift wave of change among girls from the old school of thought that girls were naturally weak.

### **Effects of attitudes on performance among types of schools**

Schools where students attitudes toward teachers were positive exhibited significantly higher academic achievements than those where students had negative or neutral attitudes. This was the case in the girls and boys boarding schools in relation to the co-educational schools. Though among students in co-educational boarding schools, the performance of students was also dependant on the attitudes of students towards teachers, the number of students with negative attitudes affected the overall performance. Number of students with neutral attitudes reduced moderately as students performance improved whereas the number of students with positive attitudes increased with improved student performance. The possible explanation offered to account for this increase in the number of students with positive attitude as performance improved is the fact that when students trust their academic environment then they expect to succeed in it. (Schunk, 1984; Faccio and Zaina, 1991; Gross, 1992, Jimenez, 1997).

In girls' boarding school, performance was also a strong function of the students' attitudes. The number of the students with negative attitudes was smaller as did lower performers, however, the number of students increased remarkably with improvement of performance among students with positive attitudes. This was in line with Atkinson, (1964) earlier diction that high academic achievers find school meaningful, enjoy school and believe that what they are doing in school will produce beneficial outcomes for them. Finally, they implement self-regulating strategies where they set realistic expectations and implement appropriate strategies to accomplish their goals successfully.

In boys' boarding schools, attitude and performance had a strong relationship. Highest number of students with negative attitudes performed lower than other students while the lowest number of students with positive attitude did not perform exceptionally well. Positive attitude therefore improves performance across all types of schools.

### **Effects of attitudes on performance of academically talented students based on Age**

From the findings of this study, a student's attitude had a significant relationship with performance. Negative attitude was found to be related to age. Among students aged 16 - 18 years, frequency of students with negative attitudes was low and thus performance was higher. Similar trends were recorded among students aged above 18 years. However, students with both negative and neutral attitudes within the age brackets of 12 - 15 years were few to sustain any statistical comparisons. There was only one student in each case.

These findings concur with Lindgren (1980) which explained that in primary grades, student's attitudes tend to be generally positive, but during the middle grades, something happens. Perhaps learning tasks are less novel and more repetitive, perhaps teachers are less supportive and permissive, or perhaps students themselves develop goal motives that are more in conflict with those of school than they were during the primary grades.

In this study, it was clearly shown that the younger students (12-15 years) who had negative and neutral attitudes were very few this is possibly caused by the adolescent growth mix-up and peer pressure. When students learn at younger age, they tend to do so with such enthusiasm that students will find it easier to learn under such aura. At this stage the students begin to set goals that are in tandem with schools needs hence school becomes attractive for students, a process that tends to continue through adolescence.

### **Conclusion**

From the findings obtained in this study, it was shown that there was a significant difference in the attitudes of the academically talented students towards their teachers. Majority of the respondents had a positive attitudes, a small number had a negative attitude while the least number had a neutral attitude. It was also established that attitude significantly affected students' performance. The research findings also showed that most females had positive attitude and hence performed very well compared to their male counterparts. The young students (12-15 years) were found to perform very well. It was still established that girls' boarding schools

performed remarkably well followed by boys boarding schools, then co-educational boarding and the worst performer was co-educational day school. From this, it was concluded that performance of academically talented students is a function of attitude.

### 5.5 Implications and policy

#### Recommendations

Based on the foregoing discussion of the findings and conclusion, the following implications and recommendations are offered to teachers, academically talented students, educators and the government regarding the education of the academically talented students in secondary schools. Most of the academically talented students were found to possess positive attitude towards their teachers and a few possessed negative attitudes while some had neutral attitudes. Both negative and neutral attitude were confirmed to affect performance hence this suggests that there is need to change these attitudes. Therefore the following recommendations were made:

1. School headteachers should evaluate non-academically talented student and categorize them in relation to their attitudes toward teachers, which would be easier to inculcate proper attitudes among them.
2. Special programmes for students with negative attitudes toward teachers which are in harmony with the basic principles of education, to be developed to ensure his/her capacities are developed.
3. Academically talented students have learning and developmental needs which are unrecognized and unmet in many regular classrooms merely because they perform well. Teachers should be encouraged to identify these needs and help bring out the best in

them which would improve the learners abilities and performance.

4. The academically talented student who underachieves should be intensively guided and counseled in order to relate well with his/her teachers for good results. Likewise a comprehensive plan of services for the academically talented student should be enacted in order to reduce the unique stressors, which make them vulnerable to difficulties with social and/or emotional adjustment.

Schools in Kenya should come up with group discussion under the guidance of academically talented students with positive attitudes towards their teachers and include other students who are less academically endowed. Such group will have a mandate of trying to encourage students to develop positive attitudes toward their teachers.

#### Suggestions for Further Research

To bring more light into the issue investigated in this study, it was suggested that the following studies be conducted.

1. A similar designed study covering the whole of Kenya to find out if the findings reached here hold true for the whole republic.
2. A similar study involving the academically talented underachieving students.
3. A similar study involving attitudes of other interest groups not covered in this study such as parents and teachers. This will enable acquisition of more information on factors influencing academic performance of the academically talented students which will assist in reaching firm conclusions on how to help this population of students exhaust their academic potential.

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**Appendix ii: Extraction of the factors affecting attitudes of students towards their teachers****Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.873	16.431	16.431	8.873	16.431	16.431
2	6.996	12.956	29.387	6.996	12.956	29.387
3	5.897	10.921	40.307	5.897	10.921	40.307
4	5.453	10.097	50.405	5.453	10.097	50.405
5	3.500	6.481	56.886	3.500	6.481	56.886
6	3.258	6.033	62.919	3.258	6.033	62.919
7	2.987	5.531	68.449	2.987	5.531	68.449
8	2.930	5.426	73.875	2.930	5.426	73.875
9	2.344	4.341	78.216	2.344	4.341	78.216
10	2.044	3.786	82.002	2.044	3.786	82.002
11	1.688	3.125	85.127	1.688	3.125	85.127
12	1.521	2.816	87.943	1.521	2.816	87.943
13	1.399	2.591	90.534	1.399	2.591	90.534
14	1.307	2.420	92.954	1.307	2.420	92.954
15	.976	1.808	94.762			
16	.956	1.771	96.533			
17	.748	1.385	97.918			
18	.652	1.207	99.126			
19	.472	.874	100.000			
20	1.025E-15	1.898E-15	100.000			
21	8.641E-16	1.600E-15	100.000			
22	7.698E-16	1.426E-15	100.000			
23	6.444E-16	1.193E-15	100.000			
24	5.680E-16	1.052E-15	100.000			
25	5.161E-16	9.557E-16	100.000			
26	5.099E-16	9.443E-16	100.000			
27	4.339E-16	8.036E-16	100.000			
28	4.117E-16	7.624E-16	100.000			
29	3.739E-16	6.924E-16	100.000			
30	2.958E-16	5.477E-16	100.000			
31	2.298E-16	4.255E-16	100.000			
32	1.909E-16	3.536E-16	100.000			
33	1.508E-16	2.793E-16	100.000			
34	8.234E-17	1.525E-16	100.000			
35	4.242E-17	7.855E-17	100.000			
36	1.707E-17	3.161E-17	100.000			
37	-2.14E-17	-3.970E-17	100.000			
38	-3.38E-17	-6.250E-17	100.000			
39	-7.13E-17	-1.320E-16	100.000			
40	-9.03E-17	-1.672E-16	100.000			
41	-1.39E-16	-2.581E-16	100.000			
42	-1.82E-16	-3.365E-16	100.000			
43	-1.93E-16	-3.579E-16	100.000			
44	-2.24E-16	-4.148E-16	100.000			
45	-2.81E-16	-5.203E-16	100.000			
46	-3.25E-16	-6.027E-16	100.000			
47	-3.53E-16	-6.529E-16	100.000			
48	-4.33E-16	-8.014E-16	100.000			
49	-4.83E-16	-8.944E-16	100.000			
50	-5.05E-16	-9.348E-16	100.000			
51	-6.15E-16	-1.138E-15	100.000			
52	-8.12E-16	-1.504E-15	100.000			
53	-1.12E-15	-2.080E-15	100.000			
54	-3.14E-15	-5.820E-15	100.000			

Extraction Method: Principal Component Analysis.

a. Only cases for which Performance = Very good are used in the analysis phase.

## Appendix iii: Factors used in the extraction of the components

Communalities		
	Initial	Extraction
Hardwork	1.000	.903
Guess work	1.000	.935
Proper teaching	1.000	.909
Enjoy studying	1.000	.930
Group discussion	1.000	.944
More revision	1.000	.948
Luck	1.000	.979
Lack of focus	1.000	.911
Laziness	1.000	.894
Boring class exercises	1.000	.960
Regular class attendance by teachers	1.000	.948
Teachers presentation of facts	1.000	.921
Teachers missing classes	1.000	.966
Teachers delivery of the subject	1.000	.911
Teachers comments on student progress	1.000	.944
Problems with teachers	1.000	.988
Individual talents	1.000	.894
Effort put on the subject	1.000	.946
Less workload to students	1.000	.967
Teachers negative remarks	1.000	.960
Good in all subjects	1.000	.970
Presence of learning facilities	1.000	.899
Teachers are role models	1.000	.974
Students initiatives	1.000	.934
Evaluation by the teachers	1.000	.926
Students responsibilities	1.000	.966
Syllabus organization	1.000	.981
Syllabus coverage	1.000	.895
Poor teaching	1.000	.846
Teachers-students relationships	1.000	.973
Decisions making by the student	1.000	.887
Concern for students welfare	1.000	.932
students freedom of opinion	1.000	.970
Teachers concern on students safety	1.000	.966
Assignment of duties and responsibilities to students	1.000	.965
B iased duties assignment	1.000	.932
Freedom to discuss disagreement among students	1.000	.954
Respect for authority	1.000	.967
Appreciation of students efforts	1.000	.956
Free choice of subjects	1.000	.954
Able to make personal decisions	1.000	.895
Verbal abuse by teachers	1.000	.934
Punishment for misbehaviour	1.000	.783
Teachers guidance on students activities	1.000	.859
Teachers presence affect attitudes of students	1.000	.961
Students freely choose respresentativ es	1.000	.958
Students are happy when teachers are absent	1.000	.941
Equal treatment of students	1.000	.973
Encouragement of students by teachers on the subjects they teacher	1.000	.884
Teachers encourage group discussions	1.000	.983
Encouragement of students to do well in all subjects	1.000	.970
Teachers offer interesting lessons	1.000	.939
Teachers have no interest on students background	1.000	.727
Teachers are ready to assist students	1.000	.782

Extraction Method: Principal Component Analysis.

a. Only cases for which Performance = Very good are used in the analysis phase.